RESULTS

R E S U L T S

Pre-Operative Films

1. Filling Defects :

Produced by the obstructing prostate was reported in 14 cases out of 25. In 3 cases of the remaining 11 the bladder was not filled with contrast or filled too faintly to be visualized which certainly due to gross urinary retention(acute or chronic). In 8 cases the filling was adequate but no definite filling defect seen .Generalized elevation of the inferior margin of the bladder was found in 2 of these cases.

Fig.(1) shows a typical smooth rounded regular filling defect Case belonged to a male age 51 duration of symptoms 4 years.

Fig.(2) shows generalised elevation of the bladder with no definit filling defect.

The relation of filling defect and its extent to symptoms is shown in table(I)where symptoms were classified into mcderate,severe complicated.

Mild symptoms evidently did not indicate surgery.

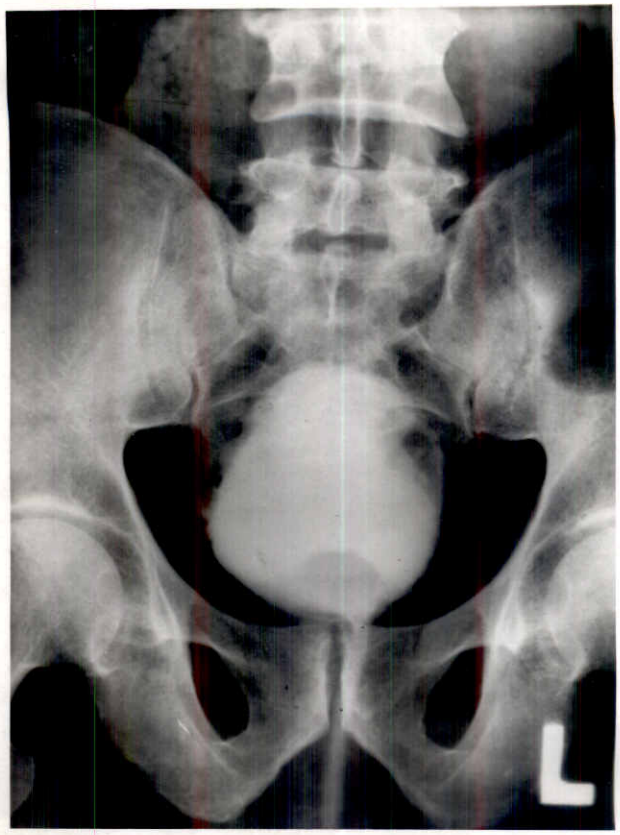

Fig. (1) A typical smooth rounded regular filling defect due to enlarged prostate.

Fig. (2) The enlarged prostate causes generalised elevation of the urinary bladder with no definite filling defect.

Complications include acute,chronic,retention and attacks of bleeding.

Table (I)

	Moderate	Severe	Complicated	Total
- Prostatic filling defect	8	5	1	14
- General elevation	1	1	-	2
- No change	2	3	1	6
- Non filling	-	-	3	3

2. Trabeculations & Muscle hypertrophy :

In 22 cases the bladder was adequately visualised. Trabeculations of the wall were reported in 15. Small diverticulae were also present in 2 of them, in the remaining 7 muscle hypertrophy was found in 5. These vesical changes were crudely parallel to severity of symptoms.

Fig.(3 & 4) show trabeculation & hypertrophy.

3. Vesico-Ureteric Reflux:

Ascending cystography was done in 10 cases. Reflux was found in only one case. Clinically the case had no special features & reported

Fig. (3) A large basal defect due to enlarged prostate with vesical trabeculations and left visico ureteric reflux.

Fig. (4) Trabeculations of the bladder wall due to enlarged prostate.

the usual symptoms of difficulty , frequency & thinness of the stream of urine. No fever or loin pain was recorded . Apparently reflux was asymptomatic. Fig. (3).

4. The Upper Urinary Tract:

Of the 25 cases operated; the upper urinary tract was visualised in all including the 3 cases where the bladder was not filled due to retained urine.

Bilateral dilatation of the ureter and renal Pelvis was found in 7 cases. The fish-hook appearance could be demonstrated in 4 cases. Table (II) shows the relation between dilatation of ureter and pelvis and the blood urea estimation.

Table (II)

	Blood Urea 20-40	40-60	60-
Dilatation 7	4	2	1
Normal Pattern 18	11	7	-

Post-Operative Films:

These were done only to 10 cases and constitute the cases followed up by us.

1. Prostatic Cavity:

Was demonstrated in all cases. In films taken after 6 months (4 cases) ,the cavity had been found much diminished in size but still evident Fig.(5).

In one case the post-operative film one month after opration showed complete inclusion of the cavity in the bladder outline.

It was a case of stricture membranous urethra complicating the operation and under treatment by dilatation.

Reflux up the ejaculatory duct was demonstrated in this case by both the ascending and descending routes Fig.(6).

2. Bladder changes:

In all but one case the post-operative films taken around one month after surgery; detrusor hypertrophy has vanished. Trabeculation were either greatly attenuated or lost. The case with diverticulae did not show any change of size of the pouches.

Vesico-ureteric reflux which was demonstrated in one case disappeared after prostatectomy Fig.(7).

The case already having poor filling of the bladder due to retnetion are 3 cases in the whole group and one of the present 10.

Fig.(5) Prostatic cavity seen 6 months after prostatectomy.

Fig.(6) Stricutre membranous urethra complicating prostatectomy. Note reflux of the contrast up the ejaculatory ducts.

This one case followed up after prostatectomy showed a better filling of the bladder after the relief of obstruction by surgery.

3. The Upper Urinary Tract:

Out of the 7 cases with upper tract dilatation 3 were included in the follow up subgroup. One of them showed post-operative improvement, not reaching normality but definitely approaching it. The other showed persistance of dilatation.

Out of the remaining 7 cases in the group who had normal upper urinary tract before surgery, showed that severe sepsis with gapping of the suprapubic wound and prolonged convalescence occured. The blood urea reached 85 mgm 1 month after operation.

Fig.(7) Post operative cystography showing attenuation of the vesical trabeculations and disappearance of the vesico ureteric reflux.

Fig.(8) Suprapubic fistula following transvesical prostatectomy.

Complicated Cases

In the 10 cases followed pre and post operatively, radiological evidence of complications was not present. But of the 15 cases whose records were present complications were found in 2 cases with new admission months after the discharge.

The first case seen in Fig. 8. is one of supra pubic urinary fistulae following transvescial prostatectomy. Examination of the film reveals that the prostate was not completely removed as a filling defect can still be seen. The fistular track is only demonstrable in the oblique views, it roughly corresponds to the site of suprapubic tube.

The second case shows 2 big vesical diverticulae with a contracted bladder . The diverticuloe were probably left deliberatly to add to the capacity and prevent distressing frequency. The prostatic bed & anterior wall of the bladder are the site of a filling defect which was reported to be carcinomatous ,which of these parts, bed & bladder was the primary & which was the secondary is not of particular importance as the tumour was found to be a transitional carcinoma . Fig.(9).

The third complicated case was one of stricture of membranous urethra with persistance of difficulty of micturition.

Radiography showed the prostatic cavity to be taken up into the bladder cavity due to its dilatation and not to its obliteration Fig. (10).

The fourth case showed a similar occurance but with irrigular filling of the prostatic bed due to phosphatic encrustation in a badly infected cavity (Fig.11).

The fifth complicated case was one of stricture membranous urethra with a diverticulum produced by the epithelialisation of a false passage made during dilatation (Fig. 12).

Fig.(9) Vesical contraction and 2 large diverticula fafter prostatectomy
Note a filling defect at the prostatic bed and anterior wall of the bladder due to carcinoma.

Fig.(10) Post operative ascending cystography showing the prostatic cavity to be taken up into the bladder cavity.
A complicated case with stricutre membranous urethra.. and persistance of difficulty of micturition.

Fig. (11) Complicated case after prostatecomy with irregular filling of the prostatic bed due to phosphatic encrustations.

Fig. (12) Stricture urethera complicating prostatectomy with a diverticulum produced by the epithelisation of a false passage made during dilatation.